REMARKS

In the Office Action mailed on July 20, 2005, the Examiner: rejected claims 1-21 as being directed to non-statutory subject matter; rejected claims 1, 2, 4-15 and 17-21 under 35 U.S.C. § 103(a) over U.S. Patent No. 6,225,995 to Jacobs et al. ("Jacobs") in view of U.S. Patent No. 6,389,467 to Eyal ("Eyal"); and rejected claims 3 and 16 under 35 U.S.C. § 103(a) over Jacobs in view of Eyal and further in view of U.S. Patent No. 6,584,468 to Gabriel et al. ("Gabriel"). Applicants herein amend claims 1-3, 5-16 and 18-21, and cancel claims 4 and 17. As a result, claims 1-3, 5-16 and 18-21 are pending. Further examination and review in view of the amendments and remarks below are respectfully requested.

Applicants' techniques are directed to enhancing the quality of original metadata associated with a streaming media file having a Uniform Resource Indicator (URI). Some of the techniques enhance the original metadata that is maintained in a database by adding additional metadata derived from the contents of the fields in the URI to the original metadata in the database. This allows the streaming media file to be searchable under the added metadata.

I. Rejections under 35 U.S.C. § 101

The Examiner rejected claims 1-21 as being directed to non-statutory subject matter. In particular, the Examiner indicated that the "system," "method," and "program product" reads on mental construct/abstract idea or, at best, a computer program, per se, and "carrier wave" does not clearly define structural elements and are not tangibly embodied on a computer readable medium.

Applicants herein amend claims 1-3 and 5-10 to address the concerns reaised by the Examiner. In particular, Applicants amend claim 1 to explicitly recite "A method in a computing system." Claims 2, 3 and 5-10 continue to depend from claim 1. Applicants herein cancel claim 4, thus making the Examiner's rejection of this claim moot.

Applicants herein amend claims 11 and 12 to address the concerns reaised by the Examiner. In particular, Applicants amend claim 11 to explicitly recite "each of said at least one computer includes at least one program stored on a computer-readable medium therein." Claim 12 continues to depend from claim 11.

Applicants herein amend claims 13 and 14 to address the concerns reaised by the Examiner. In particular, Applicants amend claim 13 to explicitly recite "A computer-readable medium having embodied thereon a program." Claim 14 continues to depend from claim 13.

While Applicants regard each of claims 15, 16 and 18-21 to be directed to statutory subject matter in their present form, Applicants herein amend claim 15 to explicitly recite "A computer data signal embodied in a carrier wave." Claims 16 and 18-21 continue to depend from claim 15. Applicants herein cancel claim 17, thus making the Examiner's rejection moot.

Data signal claims are statutory subject matter if they (1) are manufactured (i.e., not a natural phenomenon), (2) are directed to functional descriptive material, and (3) recite a practical application or cover a specific manufacture. Data signal claims are approved as statutory subject matter by training materials distributed by the USPTO. *Training Materials for the Computer-Related Invention Guidelines*, Tab 11, "Compression/Encryption Examples," Example 13. Those materials include the following example claim:

> A computer data signal embodied in a carrier wave comprising:
> a compression source code segment comprising [the code]; and
> an encryption source code segment comprising [the code].

This example was later cited favorably in a law review article written by the Solicitor of the USPTO, Nancy J. Linck, and co-authored by the Assistant Solicitor of the USPTO, Karen A. Buchanan, who participated in the drafting of the above-referenced training materials. *Patent Protection For Computer-Related Inventions: The Past, The Present,*

And The Future, Hastings Communications And Entertainment Law Journal, Vl. 18, No. 4. In that article, the above example was recited as an example of a statutory article of manufacture claim because it recites a specific manufacture. The article also stated that the claim was statutory because it has a practical application in the technological arts in that "it can be used to monitor and control the physical processes in an automated manufacturing plant." *Id.* at pp. 677-678.

Claims 15, 16 and 18-21 recite a generated data signal with the practical application of conveying code segments for reorganizing a plurality of fields of a URI, analyzing each field of said reorganized fields, identifying metadata associated with said each analyzed field, and adding said associated metadata to original metadata in a database. These claims recite data signals that (1) do not occur naturally, (2) are directed to functional descriptive material, and (3) recite a practical application of allowing the receiver of the data signal to use the code segments to improve the quality of the original metadata. Therefore, Applicants respectfully submit that claims 15, 16 and 18-21 recite statutory subject matter, and respectfully request that this rejection be withdrawn.

II. Rejections under 35 U.S.C. § 103

All of the claims stand rejected over Jacobs in combination with Eyal or Eyal and Gabriel. Applicants respectfully traverse this rejection.

As amended, all of the claims recite (1) analyzing each field of a uniform resource indicator (URI) associated with a streaming media file to determine if an association exists between each field and predetermined sets of metadata, (2) identifying metadata that is associated with each of the analyzed fields, and (3) adding the associated metadata to the original metadata in a database, where the original metadata is associated with the streaming media file. In rejecting the claims, the Examiner indicated that Jacobs' discussion of identifying the metadata associated with a browser request (col. 21, line 40-col. 22, line 15, and col. 2, line 65-col. 3, line 20) corresponds to Applicants' analyzing each field of a URI associated with a streaming media file to determine if an association

exists between each field and predetermined sets of metadata, identifying metadata that is associated with each of the analyzed fields, and adding the associated metadata to the original metadata in a database, where the original metadata is associated with the streaming media file.

Applicants respectfully disagree. Jacobs does not disclose, suggest or teach (1) analyzing each field of a URI associated with a streaming media file to determine if an association exists between each field and predetermined sets of metadata, (2) identifying metadata that is associated with each of the analyzed fields, and (3) adding the associated metadata to the original metadata in a database, where the original metadata is associated with the streaming media file. Instead, Jacobs merely describes a mechanism for supporting multiple-request operations in a stateless environment. According to Jacobs, metadata information is used to identify the transaction type associated with the browser request. (col. 23, lines 54-57). In particular, after identifying the metadata, a cartridge execution engine uses the URI information to determine the state of the transaction associated with the browser request. (col. 23, line 67-col. 24 line 3). With the benefit of this state information, the processing of the browser request can resume at the exact point at which the previous request stopped. (see col. 3, lines 10-12).

Jacobs, at col. 2, line 55-col. 3, line 20, recites:

> In a preferred embodiment, processing of a client request is performed as follows. The server receives a request from a client, and if the request is for a multiple-request operation, the server initiates an operation. Once the operation is initiated, the server may either forward the request to another entity (such as an application) for processing, or the server may process the request itself. After the request is processed, the server assembles a set of state information associated with the operation. This state information may include the identity of the client, the ID and status of the operation, what has already transpired in the operation, and any other context information associated with the operation. Once assembled, the state information is incorporated into a URL. This URL, along with the response to the client request, is sent back to the client to be maintained by the client. This state information is preferably not persistently maintained by the server.

When the client submits a second request relating to the same operation, the client sends the URL that was previously provided by the server which contains the state information. Upon receiving the second request, the server extracts the state information from the URL, and uses it to resume the previously initiated operation. With the benefit of this state information, the server can resume the operation at the exact point at which the previous request stopped. Once the operation is resumed, the server either processes the request, or forwards it to another entity for processing. After the second request is processed, the server updates the state information associated with the operation, and incorporates the updated state information into another URL. This URL, along with the response to the second request, is sent back to the client to be maintained by the client. The client will send this URL in a future request to resume the operation. (emphasis added.)

Jacobs, at col. 21, line 40-col. 22, line 15, recites:

Each browser request contains URL information that is sent from the sending browser in response to a user of the browser selecting a hypertext link on an HTML page. The URL information includes a Uniform Resource Indicator (URI) portion and a header section. The URI portion includes transaction state information and a cartridge name. The transaction state information is used to identify the particular state of a multiple-request transaction. The cartridge name is used to identify the cartridge type and allows the cartridge execution engine to identify the metadata that is associated with the browser request.

The header section is used to store a globally unique transaction ID that is used by the database servers to identify the multiple-request transaction that is associated with a particular transaction request.

When a listener receives the browser request, it passes the browser request to the dispatcher. The dispatcher then communicates with the virtual path manager to determine the cartridge type that is associated with the browser request. In one embodiment, the dispatcher forwards the information contained in the URI to the virtual path manager. Using the information in the URI, the virtual path manager communicates with the configuration provider to determine the cartridge type that is associated with the browser message.

Once the cartridge type is identified, the virtual path manager returns data that identifies the cartridge type to the dispatcher. The dispatcher then searches a cartridge instance pointer list that includes pointers to cartridge instances that have previously been associated with the particular dispatcher. If the dispatcher locates a pointer to a cartridge instance that is of the cartridge type that is associated with the browser request, the dispatcher uses the pointer to send a revised browser message to the cartridge instance.

> If the dispatcher does not locate a pointer to the type of cartridge instance that is associated with the browser request, the dispatcher communicates with the resource manager to obtain a cartridge instance of that type. In obtaining the cartridge instance, the dispatcher sends a message to the resource manager that includes the cartridge type that was previously identified by the virtual path manager. (emphasis added.)

According to Jacobs, the URI portion of the browser request URL includes transaction state information and a cartridge name. Of these two URI fields, only the cartridge name is used to identify metadata. Moreover, Jacobs' identified metadata is associated with the browser request (i.e., the URL). This is in contrast to analyzing each field of a URI associated with a streaming media file to determine if an association exists between each field and predetermined sets of metadata, as recited. Applicants can find in Jacobs no such disclosure or suggestion.

With regard to adding the associated metadata to the original metadata in a database, where the original metadata is associated with the streaming media file, Examiner stated in the present Office Action that "the Examiner broadly interprets adding associate metadata to original as an updating feature equivalent to (see Jacobs) the resource manager updating rows." Applicants respectfully disagree with the Examiner. According to Jacobs, if a cartridge is idle for more than a certain amount of time, the dispatcher removes a row entry from a status table and sends a message to the resource manager that the listener is releasing ownership of the cartridge. In response to the message, the resource manager updates a row in its state information table to indicate that the cartridge is not owned by any listener and may thus be reassigned to another listener or terminated. (described at col. 13, lines 13-67, and shown in Figs. 4 and 5). Thus, in Jacobs, the "update" is of a field of a record in a table, where the field indicates ownership of the cartridge, and Jacobs updates this field by replacing the prior contents of the field with new contents to indicate that the cartridge is not owned by any listener. Stated differently, Jacobs' update replaces the old ownership information in the field with the new ownership information. This is in direct contrast to adding the associated metadata to

original metadata in a database, as recited. Applicants can find in Jacobs no such disclosure or suggestion.

III. Conclusion

In view of the foregoing, Applicants respectfully submit that claims 1-3, 5-16 and 18-21 are allowable and ask that this application be passed to allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-8000.

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Respectfully submitted,

By _____

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